

Collins And Armstrong will have jobs in D.C.

"Busy" is not the word to describe Apollo 11 astronauts Neil Armstrong and Michael Collins.

Low sworn in as Deputy Administrator

As reported in the previous issue of the "Roundup", former Manager of the Apollo Spacecraft Program, George M. Low, has been selected to serve at NASA Deputy Administrator. At that time no word had been received as to actual confirmation of Mr. Low by the Senate. He was confirmed on November 26, and was sworn in by NASA Administrator, Dr. Thomas O. Paine, on December 3.

Three men have preceded Low in the post: the late Dr. Hugh L. Dryden, Dr. Robert C. Seamans, Jr., now Secretary of the Air Force, and Dr. Paine himself.

Not only have they been on speaking trips, toured the world as goodwill ambassadors, and flown to the Moon and back, but both have been appointed to jobs in Washington as well.

Armstrong has taken a post as member and chairman of the Peace Corps National Advisory Council. The job will take only part of his time, however, and he will retain his astronaut status.

Collins will make a full-time job of his post as assistant secretary of state for public affairs. As assistant secretary he will head various promotional offices which publish informative materials. He will also make public appearances on behalf of the State Department, provide speakers, and handle other public contacts.

Collins will resign his Air Force Commission, and will leave NASA and his job as an astronaut.



MCC as seen during Apollo 11 by artist Franklin McMahon. This work, and some 70 additional art works about Apollo is currently being shown at the National Gallery of Art, Washington, D. C.

Kraft, Johnston, Abbey get new jobs

Former Director of Flight Operations, Christopher C. Kraft, Jr., has become Deputy Director of MSC, it was announced recently by MSC Director Gilruth.

Dr. Kraft, one of the original S.T.G. members, has been directly

responsible for all flight operations from Mercury through Apollo. He developed the basic concepts now operating in the MCC.

As Deputy Director, Kraft will act for the Director on Administrative and technical matters and will represent MSC with NASA Headquarters and outside groups. He will assist Dr. Gilruth in planning and directing all phases of MSC operations.

Richard S. Johnston, previously Dr. Gilruth's Special Assistant, is now the Manager, Experiments Program, Apollo Spacecraft Program. He will direct the management, development, and integration of all science, engineering, and medical experiments.

George W. S. Abbey moved from his position as Technical Assistant to the Apollo Spacecraft Program Manager to the position of Assistant to the Director.



Christopher C. Kraft

Art of Apollo now on display

Last Sunday, December 7, more than 70 paintings, drawings, and sculptures related to the Apollo missions went on display at the National Gallery of Art in Washington, D.C.

With few exceptions, the art works have been selected from the NASA art program, now in its seventh year. Under the program, artists have been invited to visit NASA sites and record America's early steps into space in whatever way they see fit.

Those artists whose works are being exhibited represent a wide spectrum of the art community, and include styles as divergent as those of Norman Rockwell, Robert Rauschenberg, James Wyeth, and Lamar Dodd.

Gilruth wins unique Award

The winners of the Rockefeller Public Service Awards for 1969 were announced last week. This year, in addition to the five awards given annually for a variety



of achievements in government, there is a new award. The special "At Large Award," the first ever given in the Rockefeller Awards' 17 year history, was conferred upon MSC Director Robert R. Gilruth.

The honor includes a tax-free \$10,000 award.

The Awards are the highest privately-sustained honors for the nation's career services. John D. Rockefeller the 3rd conceived and financed them as a way of recognizing "Distinguished service to the Government of the

United States and to the American People."

Dr. Gilruth is being honored, the Selection Committee reports, for "an extraordinary accomplishment of so broad a nature it can not properly be categorized by one field of endeavor."

Dr. Robert F. Goheen, President of Princeton University, where the Woodrow Wilson School of Public and International Affairs administers the trust for the Awards, commented upon the significance of the awards. The recipients, he said, "not only

ROUNDUP

NASA MANNED SPACECRAFT CENTER

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"28 Days Without Sun"

At precisely 2:00pm Wednesday, the Apollo crew walked into the sunshine outside the Lunar Receiving Laboratory.

Conrad commented that after something like 28 days without sun, it was great to be outside. "The LRL was really quite pleasant", he said, but all the men were glad to breathe some "non man-made air" for a change.

Their only plans, as they left the LRL, were to relax with their families, do a little office work, and maybe pursue their hobbies—hi-fi and golf were mentioned. Friday morning at 9am they are scheduled for a press conference in the Building 1 auditorium.

Meanwhile, results from their flight have begun coming in.

Photographs taken of the Fra Mauro area, plus the demonstrated ability to achieve a pinpoint landing have lead to the decision to proceed, as originally planned, with plans to land Apollo 13 at the Fra Mauro site. Fra Mauro is a flat, vast highland area located at 17 degrees 36 minutes west longitude and 3 degrees 48 minutes south latitude, approximately 110 miles east of the Apollo 12 landing spot in the Ocean of Storms.

Preliminary examination of the LM television camera which stopped transmitting a usable picture

from the lunar surface indicates that the failure was not mechanical or electronic, but was due to burn-out of the top portion of the tube.

Evaluation of data from the lunar surface, while exciting, is still puzzling to P. I.'s here on Earth. The most puzzling data so far has been the "reverberation" of the lunar surface following impact of the LM ascent stage near the ALSEP Passive Seismic Experiment. Is the surface a "gravel sandwich" of lava-like matter and rubble, or simply a rubble layer? Does the vacuum of space and the absence of such damping materials as liquids and gas affect the phenomena? Scientists are still not in agreement.

merit the individual recognition accorded them, but in addition they serve as symbols of the ability, dedication, and achievement of people working at high levels of the Federal Government who have chosen career service as a way of life.

"As in the past, this year's Rockefeller Public Service Award winners also will be an inspiration to thousands of young people who are considering or may consider joining the Federal career service and devoting their lives to serving the American people."



Queen Elizabeth greets astronaut Armstrong.



President Mobutu presents awards to Mrs. Aldrin, Mrs. Collins, and Mrs. Armstrong.

Between 8 and 10 thousand Norwegians crowded along Oslo's Karl Johan Street to applaud the Apollo 11 astronauts.



"Giant step" group ends world tour

Phileas Fogg had 80 days to do it. The Apollo 11 astronauts had only 38. Leaving Andrews AFB on Monday, September 29, returning Wednesday, Nov. 5, they completed a grand tour of 30 cities in 25 countries. The crew of Air Force 1 calculated that they had flown 45,803 miles, crossed the Equator 4 times, prepared almost 2,000 in-flight meals.

In each country the astronauts were received by Heads of State or their Prime Ministers, were interviewed at press conferences, exchanged gifts, were honored guests at luncheons, dinners, and ceremonial occasions, and, if the schedule permitted, toured local points of interest and shopped for souvenirs.

Royal welcome

Among the names of foreign dignitaries most familiar in this country, the astronauts were welcomed by General Franco, President Georges Pompidou,

King Olav V, Her Majesty Queen Elizabeth II, President Mobutu, of the Congo, President Marshall Broz-Tito, and Emperor Hirohito, of Japan. They were granted a private audience with His Holiness, Pope Paul during their stay in Rome.

The Japanese Government broke with tradition and awarded the trio its Order of Culture — the first time the honor has been conferred on a non-Japanese. They were decorated on 8 other occasions, with the Congo's Order of the Leopard, Iran's Order of Taj, and the Order of the White Elephant in Thailand, to name a few.

The "Green Book" which housed the astronauts' itinerary filled a fat binder — and all it listed were the bare essentials — names, times and places.

What it didn't contain were the spur-of-the-moment jaunts, the 6 am baggage calls, and the middle of the evening beauty

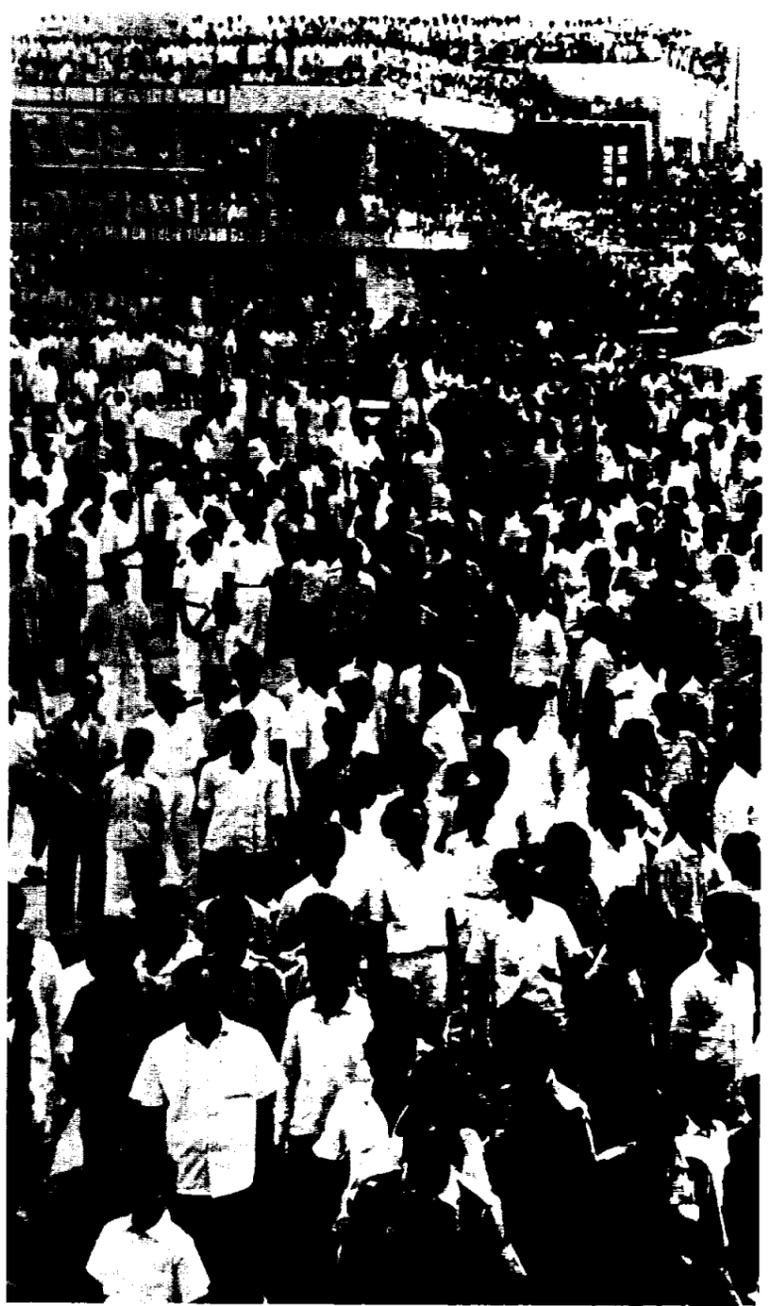
shop visits for the ladies.

Lighter moments

In Mexico City, Armstrong, Aldrin and Collins were guests at the city's oldest restaurant. In Bangkok the crew and their wives were fascinated by all of the brass and other Oriental art objects and souvenirs. Everywhere they went crowds were spontaneously enthusiastic, offering congratulations and good wishes. In Perth, as Mike Collins came up to the microphone before a huge outdoor crowd, the entire assemblage sang "Happy Birthday to Mike". In Amsterdam they were treated to a river cruise. In Kinshasa, the Congo, the Presidential Plane was met by Congolese bands and dancers, and a reception in Yugoslavia featured peasant songs and dances in native costumes.

Official duties

Naturally, the trip included many ceremonies. In Madrid the crew participated in a wreath-



The crowd at Dacca airport overflowed the terminal building.

laying ceremony at the statue of Christopher Columbus. They were presented to the Norwegian Parliament. In Berlin they stopped for a look at the Wall, then returned to City Hall for ceremonies and an exchange of gifts. In some places the astronauts presented photographs of Moon activities. At other times their gifts were silicon discs the size of a 25¢ piece engraved with the goodwill messages from 72 Heads of State, replicas of the disc they

took with them to the Moon. In return they received gifts ranging from persian rugs to porcelain, to the Keys of the City, all signifying the good will of the host country.

When they landed in Washington to end their tour, the astronauts looked "game but exhausted" as President Nixon congratulated them on the success of their trip. It was, the President said, "the most successful goodwill trip in the history of the United States."

PICTURES, clockwise from top left: Hostess Queen Elizabeth; Congolese Medals for the wives from President Mobuto; crowd at Dacca airport; miniature moonmen along the parade route in Bonn; honorary matadors in Madrid, with the attire of some of Spain's most revered matadors; audience with Pope Paul; welcome in Oslo.



During their audience with Pope Paul, the three astronauts presented His Holiness with a silicon disc encapsulating a replica of the plaque which they carried with them to the Moon.



In Madrid, they were "honorary matadors". They were given the attire of some of Spain's most revered matadors.



These miniature moonmen waited patiently in Bonn to see the astronauts.

Roundup Swap-Shop

(Deadline for Swap-Shop classified ad is the Thursday preceding Roundup publication date. Ads received after the deadline will be run in the next following issue. Ads are limited to MSC civil service employees and assigned military personnel. Maximum length is 15 words, including name, office code and home telephone number. Send ads in writing to Roundup Editor, AP3.)

WANTED

- Old-type cedar chest, must be in fair or good condition, Burch, 427-4532, or x4386
- Typewriter for high school student to practice on at home, Ramirez, 472-4559 after 5pm.
- Want to rent pickup to move furniture, one afternoon, Grogan, x4900 or 932-5417
- Male roommate to share apartment, Rhodes, 483-7626 before 4:30
- Drivers to join carpool from Texas City, 8:40, Sutton, 948-3095
- Yoga students, beginner's exercise class with experienced instructor, very nominal fee, NASA area, Johnson, 591-3541
- Someone to form car pool from Pasadena, Briar Cliff Apartments to building 4, 8:30-5, call 944-8241 after 5:30.
- Persons interested in sharing cost of recorder to transcribe personal tapes or records to auto tape cartridges, Campagna, 591-2974
- Electric adding machine and portable electric typewriter, Mobley, 488-1259

MISCELLANEOUS

- Stereo, mahogany case and separate speaker, needs repair, \$25, Baker, 935-3912
- 300 Weatherby Magnum Sako, weaver K-6 scope, sling, \$165, x2415, Jack, or 422-5782 (Baytown)
- Teac stereo tape deck, slightly used, 4-track, automatic reverse, self-contained amplifier, walnut cabinet, 3 motors, 4 heads, 2 large VU meters, perfect, \$295, Pittman, 483-5026 or 488-1243
- Baldwin console piano, mahogany, perfect condition, \$500, McCarver, 453-1004
- Social membership Clear Lake Country Club, save \$75, take advantage of Christmas parties, Johnson, 591-3541
- Dolphin Jr., sailboat, \$150, Bland, 932-2042
- Beautiful homemade patch quilts in wedding rings, pinwheel, and block designs, twin or double bed sizes, dacron lining, long wearing, washable, \$25 up. Hill, 471-4305
- Polaroid 230 camera with flash, \$50, 20" human hair fall with case, \$70, baby bed, \$10, Thompson, x5446.

- Golf clubs, excellent youth starter, \$14, 20" grl's bike, training wheels, excellent, \$15, Cheatham, 877-1201 or x4283
- Shotgun, Chas. daly dbl. 20 gauge man. new, \$180 or trade for guns, Buck, 932-2035
- Washer and gas dryer, excellent condition, RCA Whirlpool, Smith, 7681 or 877-3300 after 5:30.
- Much-used by OK man's and woman's 26" bikes, \$15 for the two, Sherwood, x2094 or 877-2909
- 14' sailboat, fiberglass, cabin, 2 bunks, equipment, \$1000 with trailer, Cree, 487-1158.
- Golf clubs, bag and cart, 1,2,3 woods, 2-9 irons, \$40, Newman, 474-3497
- Portable sewing machine, originally \$200, used very little, \$75 or best offer, Hendrickson, 946-7515
- Car top luggage carrier metal and wood, holds over 10 bags, locks securely, Campagna, 591-2974

AUTOS

- 69 Volkswagon squareback, air, radio, automatic, 7,000 miles, beige, \$2595, 488-0405, Geitry
- Good go-cart, 2 1/2 hp, new tires, plus parts of 3 engines, \$115, Bland, 932-2042
- 61 Corvair, 4-dr automatic, good condition, owner, Lapko, 946-4311
- 68 Corvette coupe, 4-speed, air, power steering, positraction, low mileage, one owner, Samonski, 877-4795
- 65 VW Squareback wagon, needs left front fender, hood and bumper, has radio, \$450, Morton, 946-4752.
- 67 Fiat 125 sport, a real sports car, 4-speed, double ov'hd cam, Pirelli radials, a/c \$1875, Pedersen, 474-2123
- 66 Chevelle, V8, automatic, factory air, tinted glass, radio, \$1400, Holub, 465-8288
- 64 Corvette, new motor and tires, headers, cam, 400 hp, excellent, 447-0409, White, or x 5171
- 67 Plymouth Fury VIP 2-dr hdtp, dk. green, black vinyl top, A/C power, power seats, 383
- 68 Corvette coupe, 327/340 hp, 4-speed, air, ps, one owner, NADA wholesale, Nygren, 932-4289
- 69 Chevy Nova, like new, all the extras, \$2199, come and get it! Manry, 932-2908
- 175cc Bridestone motorcycle 3000 miles, good condition, x 4751, Dick, or 944-4800
- 64 Imperial, loaded, excellent condition, radial tires w/20,000 warranty remaining, best offer, Campagna, 591-2974
- 67 Honda 160 CL, scrambler pipes for trailer, excellent mechanically, Lewis, x 2766, or 488-2801
- 59 Ford pickup, automatic transmission, runs well, \$150, Brockwell, 946-0204 after 4
- 69 Chevy pickup 1/2 ton, 4-speed, L.W.B. deluxe, 4,500 miles, trade for Kombi or \$2300, Buck, 932-2035
- 64 Ford, 2-dr hdtp, Galaxy 500, overdrive, air, \$525, Kiehn, HU 3-3485
- 64 MGB convertible, new top and tires, very good condition, HU 2-7195
- 66 Chevelle 396 Super Sport, R/H, air, power, stereo hookup, blue book \$1700, sacrifice for \$1395, Hooper, 877-1328
- 60 Falcon station wagon, good work car, \$250, Springfield, x 2501

PETS

- Tropical fish, from single fish up to complete 15 ga. aluminum setups, excellent Christmas gifts, Lindemuth, 482-1086
- Adorable Beagle pups, AKC registered, tri-colored, small breed, shots, available Dec. 5, \$35, Mallary, x 2191 or 482-7081
- Fine AKC registered Beagle pups. Will hold for Christmas, \$25 and \$35, Willis, 944-3647

HOME FURNISHINGS

- Early American sofa, \$75; folding bed, \$10; mattress for double bed, \$10; all in good condition, White, 591-3813
- Baby gear: crib + mattress, \$18; bathinette, \$3; infant seat, \$4; sterilizer, \$4; electric dish, \$2.50, etc., Davis x 3681 or 485-2905
- Sofa, two tables, coffee table, \$35; Antique Regency sofa, \$145, Baker, 935-3912
- 3-piece bedroom suit, small scale, painted white, double bed with bookcase headboard, \$50, Park, 487-1255

REAL ESTATE

- Rent - Clear Lake City Townhouse, 3-2 1/2-2, 1435 Ramada available late December, Wieland, 488-2593
- Wooded lot, Oak Ridge North, 15-20 minutes to Intercontinental 90x150, \$4400 Newman, 474-3497
- Alameda mall, Beverly Hills, 3-2-2 brick, central A/H, equity, \$137/mo Wakeland, 946-6502
- Small frame house in Dickinson near Bayou; carpet, garage, new outside paint, utility building in back, furnished or unfurnished, \$7,000, 658-4855 (Alvin) or HU3-5271, Morris
- 3-1-1, Pasadena-Red Bluff, \$11,500 completely refinished, fenced, yard, trees, patio, school 2 blocks, 472-6980
- 3-2-2 Clear Lake City, owner, Living, dining, den, fenced, near school, reasonable equity, assume 6%, 488-3496, Shea

Co-Op of month



James E. Rader
Univ. of Cincinnati

Engineering Analysis Office
Jim is currently working on the MSC configuration for the space shuttle orbiter. His work on the calculation of the pressure distribution of the airfoils has made him an asset to the Section.



"THOSE ROCKHOONDS TOOK THREE OF HER EGGS."

Lunar Exploration discussed Tuesday

Mr. Harold Masursky, Supervisory Geologist and Chief, Branch of Astrogeologic Studies of the U.S. Geological Survey at Flagstaff, Arizona, will address the MSC Scientific Colloquium Series on December 16, 1969. Mr. Masursky will speak at 3 p.m. in the Building 1 Auditorium.

Mr. Masursky's career has been varied. In addition to other professional activities, he was a member of the Ranger, Lunar Orbiter, and Surveyor site selection teams;

a member of the Surveyor Working Group on Lunar Theory and Processes; member of the Group for Lunar Exploration and of the Geodesy, Cartography Subcommittee of the Space Science Board; and a television team leader and principal investigator for the Mariner-Mars 1971 mission. He is an expert in the origin of lunar peaks and craters.

MSC and contractor personnel are invited to attend.

Your Job in Focus

Gifts & Gratitude

With the holiday season near, it is appropriate to remind employees of the policy with regard to handling gifts and gratuities. NASA regulations forbid solicitation or acceptance by a NASA employee (or his spouse or minor child) of any gift, gratuity, entertainment, favor, loan, or any other thing of value from any person or corporation where there is a possible or even an apparent conflict of interest. Regulations provide for certain permissible exceptions, such as acceptance of food or refreshments of nominal value on infrequent occasions in the course of luncheon or dinner meetings, unsolicited advertising or promotional materials of nominal value, etc. Those gifts which are prohibited should be returned to the donor if possible.

Green around the gills?



Before leaving for the moon, Astronaut Bean set a new record for the most parabolic maneuvers flown on a training mission—101 parabolas in three hours 20 minutes flying time. In all, Bean had about 55 minutes of lunar surface simulation time. During the flight Bean practiced walking, tumbling, falling, and getting up and down the LM ladder with the lunar sample return boxes.

The maneuver starts with the aircraft diving from 26,000 feet to 24,000, pulling up to 34,000 and going over the top of the curve and back to 24,000 and up again. The parabolic curve for lunar "G" is slightly flattened at the top to give the one-sixth "G" effect, which is several seconds longer than Zero "G."

Pilot for the mission was Lt. Col. John Carlson, with Capt. Robert Keller as co-pilot. Elno Weimer was flight engineer. NASA personnel on the record-setting flight were: Jack Slight, Jose Fuentes, George Mulcahy, James Boltz, and Taylor Moorman.

ROUNDUP

NASA MANNED SPACECRAFT CENTER HOUSTON, TEXAS



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US Pavilion at Expo features NASA

The Japan World Exposition, popularly known as "Expo '70" will open its gates on March 15. Over 50,000,000 visitors are expected to view the Fair, built at an estimated cost of \$½ billion, between opening day and September 13, when the Fair will officially close.

More than 70 nations are building exhibits. The 3 major sites have been assigned to the US, the USSR, and Japan itself.

The United States Information Agency has responsibility for the planning of the US pavilion, which, it says, will demonstrate the "diversity and creativity characteristic of the American Spirit."

With this in mind, it is natural that America's Space program should be prominently featured. Thus, the largest single exhibit area in the US Pavilion will be devoted to American accomplishments in space exploration.

The 100,000 square-foot area of the U.S. Pavilion is underground, enclosed by a translucent super-elliptical shallow dome, air-

supported cable roof. The roof will permit sunlight to pass through during the day, and will glow at night from interior light. It will be the largest clear span, air-supported roof ever built.

Charles A. Biggs, Chief of MSC's Exhibits Division, is coordinating NASA's part of the U.S. Pavilion. There will be four platforms of display cases, a lunar sample display, a photo-mural wall and 26 photo boxes. LM 2 will be displayed, resting on a full-scale simulation of the landing site of Apollo 11 in the Sea of Tranquility. Visible nearby will be some of the paraphernalia left on the moon by the astronauts—a TV camera, an American flag, a laser beam reflector, a solar wind sheet, a special stereo camera and a sun-powered seismometer.

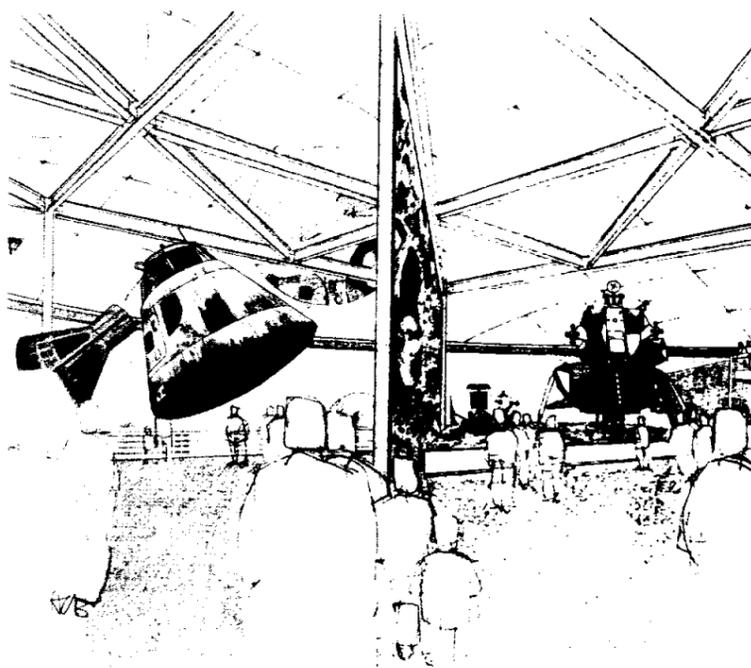
The history of space exploration leading to the moon voyage will be traced through the display of a variety of scientific satellites, including five 12-foot Explorer weather balloons, a Lunar Orbiter

photo laboratory and a Relay Communications Satellite, and flight-flown Mercury, Gemini and Apollo modules which will be suspended over the display area.

The display cases will highlight some of the more human-oriented items: medical kits, survival kits, food packs, etc. One case will display tools such as the flyball tool, the aerojet tool, and the modified special screw driver. The Astronaut Office will contribute personal items from previous flight crews—shoulder patches, watches, Captain Schirra's tiny harmonica, and so forth.

Rounding out the Exhibit will be a number of miscellaneous support components—an F-1 rocket engine used in the Saturn V, a fuel cell, a cryogenic tank, flight-flown cameras, PLSS components, and seat molds from astronaut flight couches.

Want to see it for yourself? The Airline says that a 2-3 week excursion round-trip ticket from Houston to Osaka would run only about \$780. Bon Voyage!



Sketch of the planned NASA exhibit at Osaka shows some of the flight hardware which will be on display.

Here's a Christmas warning:

"Fire never takes a holiday—not even on Christmas!" The Industrial Safety Office repeats this timely reminder from the National Fire Protection Association which urges everyone to keep fire safety in mind when planning Christmas trees, lighting, decorations and gifts. Each year lives are lost in Christmas tree fires, and last year in the U.S. alone holiday fires damaged or destroyed property valued at \$2.8 million.

Christmastime fire safety begins with attention to two general rules—good all year round: "Never leave children alone or without proper supervision," even for a brief time while shopping for last-minute gifts, and "Have a family escape plan" worked out and rehearsed for use in case of fire at home.

Christmas fire safety recommendations will help keep your holiday a safe and happy one:

★ Natural trees should be fresh and firm when you select them. Saw off an inch of the trunk, stand the tree in water, and keep

it watered until you dispose of it—which should be soon after Christmas Day. Don't rely on do-it-yourself flameproofing treatments, as none is truly effective. Set up the tree away from heat and where it won't block doorways or stairs.

★ Artificial trees should be clearly marked as made of slow-burning materials. Look for the Underwriters' laboratories (UL) label on trees with built-in electrical systems.

★ With metal trees, use only indirect lighting to avoid the possibility of electric shock.

★ Check lighting strings for frayed wires, loose connections, broken sockets. Replace only with UL-labeled sets. Electric cord sets with built-in fuses are strongly recommended. Always turn off tree and other indoor holiday lighting when leaving the house or retiring for the night.

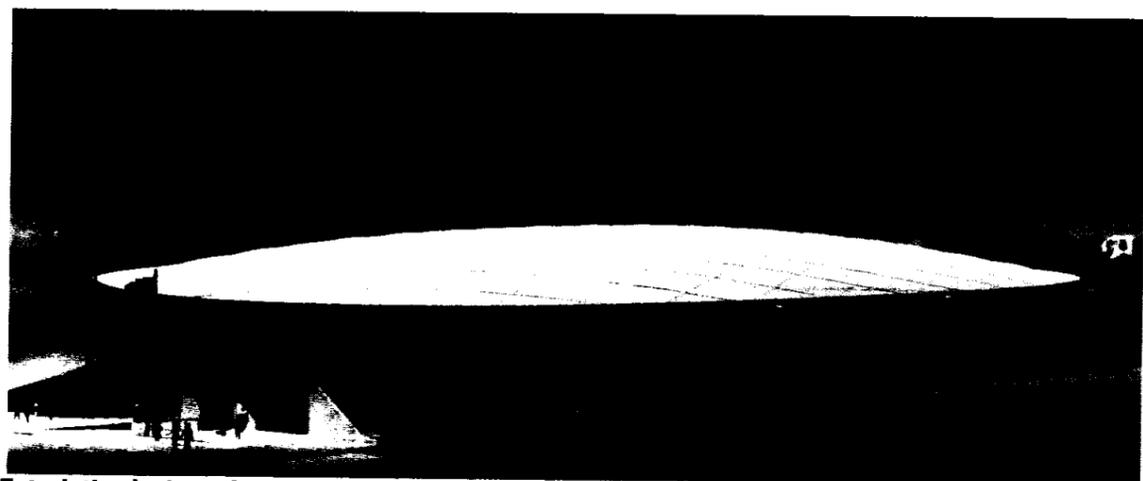
★ For outdoor lighting, use only sets UL-listed for this purpose. Metal, glass and asbestos should be used for decorations as much as possible.

★ Dispose of gift wrappings promptly and safely.

★ Be especially careful during the Christmas season to keep matches and cigarette lighters out of the reach of children, and try to keep the youngsters from playing beneath or near the Christmas tree.

Thank You Jaycees

We would like to thank the League City Jaycees for donating the evergreen Christmas trees for the Children's Christmas Party.



Futuristic design of U.S. Pavilion at the Japan World Exposition will be a translucent air-supported cable roof covering a space approximately the size of two football fields. This will be the largest clear-span, air-supported roof ever built.

Schedule for "Moon Stones"

Starting this month, 15 lunar samples, most weighing between two-thirds and 2½ ounces, will go on display around the U.S., and throughout the world.

The first stone to be released remains on exhibition at the Smithsonian in Washington, D.C.

A second stone will accompany the Apollo 11 Command Module on a tour of the fifty state capitols. A third resides in the MSC exhibit area of Building 1.

The remaining five lunar rocks will be circulated for two-month showings which will cover 30 museums and planetariums throughout the U.S.

For December of this year and January of next year, the stones will be displayed in New York, Chicago, Philadelphia, Los Angeles, and Atlanta.

The USIA is scheduling six of the stones in its custody on a world tour and the seventh lunar rock will be displayed at Expo '70, in Osaka, Japan. (see article, this page).

From: Langley To: MSC



The copper-engraved case held by Dr. Gilruth pays tribute to the ties between MSC and the Langley Research Center. The gift was presented to Dr. Gilruth on a recent trip to Langley. It contains 3000 signatures and the good wishes of the Center which was the first of the NACA facilities, before NASA was established. The inscription reads: "To the staff of the Manned Spacecraft Center from the staff of the Langley Research Center in recognition of your outstanding accomplishment in the development of the Apollo Spacecraft and in your direction of the historic flight of Apollo 11 resulting in man's first landing on the Moon."